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(FILE 'HOME' ENTERED AT 14:06:21 ON 06 MAR 2003)

FILE 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH' ENTERED AT 14:06:38 ON 06 MAR 2003

L1 3777 S FIBRIN(3A)MONOMER  
L2 15630 S (PREVENT? OR AVOID) (4A)POLYMER?  
L3 26 S L1 AND L2  
L4 11 DUP REM L3 (15 DUPLICATES REMOVED)  
L5 7675549 S ACID OR CHAOTROPIC(W)AGENT  
L6 570 S L1 AND L5  
L7 260 S L6 AND POLYMERIZATION  
L8 144 DUP REM L7 (116 DUPLICATES REMOVED)

=> d au ti so 100-144 l8

L8 ANSWER 100 OF 144 CAPLUS COPYRIGHT 2003 ACS  
AU Bajusz, Sandor; Szell, Erzsebet; Barabas, Eva; Bagdy, D.  
TI Structure-activity relationships among the tripeptide aldehyde inhibitors of plasmin and thrombin  
SO Pept.: Synth., Struct., Funct., Proc. Am. Pept. Symp., 7th (1981), 417-20. Editor(s): Rich, Daniel H.; Gross, Erhard. Publisher: Pierce Chem. Co., Rockford, Ill.  
CODEN: 47LMAO

L8 ANSWER 101 OF 144 CAPLUS COPYRIGHT 2003 ACS  
AU Torbet, J.; Freyssinet, J. M.; Hudry-Clergeon, G.  
TI Oriented fibrin gels formed by **polymerization** in strong magnetic fields  
SO Nature (London, United Kingdom) (1981), 289(5793), 91-3  
CODEN: NATUAS; ISSN: 0028-0836

L8 ANSWER 102 OF 144 CAPLUS COPYRIGHT 2003 ACS  
AU Lyapina, L. A.; Kudryashova, I. B.  
TI Heparin complexes with DNA: formation, properties and methylation in vitro  
SO Biokhimiya (Moscow) (1980), 45(12), 2189-97  
CODEN: BIOHAO; ISSN: 0006-307X

L8 ANSWER 103 OF 144 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 50  
AU Laudano, Andrew P.; Doolittle, Russell F.  
TI Studies on synthetic peptides that bind to fibrinogen and prevent fibrin **polymerization**. Structural requirements, number of binding sites, and species differences  
SO Biochemistry (1980), 19(5), 1013-19  
CODEN: BICHAW; ISSN: 0006-2960

L8 ANSWER 104 OF 144 MEDLINE  
AU Soria J; Soria C; Juhan I; Perrimond H; Haverkate F; Orsini A  
TI Fibrinogen Marseille. A new case of congenital dysfibrinogenaemia.  
SO HAEMOSTASIS, (1980) 9 (4) 214-25.  
Journal code: 0371574. ISSN: 0301-0147.

L8 ANSWER 105 OF 144 MEDLINE  
AU Babu S C; Bole P; Sharma P; Purdy R; Clauss R H  
TI Pathological fibrinolysis secondary to pseudoaneurysms.  
SO SURGERY, (1980 Feb) 87 (2) 202-4.  
Journal code: 0417347. ISSN: 0039-6060.

L8 ANSWER 106 OF 144 CAPLUS COPYRIGHT 2003 ACS  
AU Zimmermann, R. E.  
TI Role of carbohydrates and the terminal N-acetylneuraminic acid

- of fibrinogen in the fibrin formation
- SO Fibrinogen, Fibrin Fibrinkleber, Verhandlungsber. Dtsch. Arbeitsgem. Blutgerinnungsforsch. Tag., 23rd (1980), Meeting Date 1979, 47-9. Editor(s): Schimpf, Klaus. Publisher: Schattauer, Stuttgart, Fed. Rep. Ger. CODEN: 44QIAG
- L8 ANSWER 107 OF 144 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
 AU SORIA J; SORIA C; RYCKEWAERT J J; SAMAMA M; THOMSON J M; POLLER L  
 TI ACQUIRED DYS FIBRINOGENEMIA IN LIVER DISEASE.  
 SO THROMB RES, (1980) 19 (1-2), 29-42.  
 CODEN: THBRAA. ISSN: 0049-3848.
- L8 ANSWER 108 OF 144 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
 AU LUGOVSKOI E V; LYAPINA L A; GOGOLINSKAYA G K; DERZSKAYA S G  
 TI AMINO TERMINAL AMINO-ACIDS OF THE PROTEIN OBTAINED BY DISSOLUTION OF A NONSTABILIZED POLYMERIC FIBRIN BY THE HEPARIN ADRENALINE COMPLEX.  
 SO BIOKHIMIYA, (1979 (RECD 1980)) 44 (12), 2196-2200.  
 CODEN: BIOHAO. ISSN: 0006-307X.
- L8 ANSWER 109 OF 144 MEDLINE DUPLICATE 51  
 AU Mukhacheva I A; Byshevskii A Sh  
 TI [Interaction of phosphatidyl serine with **fibrin monomer**].  
 Vzaimodeistvie fosfatidilserina s fibrin-monomerom.  
 SO BIOKHIMIYA, (1979 Nov) 44 (11) 1944-51.  
 Journal code: 0372667. ISSN: 0320-9725.
- L8 ANSWER 110 OF 144 CAPLUS COPYRIGHT 2003 ACS  
 AU Pozdnyakova, T. M.; Musyalkovskaya, A. A.; Ugarova, T. P.; Protvin, D. D.; Kotsyuruba, V. N.  
 TI On the properties of **fibrin monomer** prepared from **fibrin** clot with acetic acid  
 SO Thrombosis Research (1979), 16(1-2), 283-8  
 CODEN: THBRAA; ISSN: 0049-3848
- L8 ANSWER 111 OF 144 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
 AU KUDRYASHOV B A; LYAPINA L A; ZHITNIKOVA E S; KRYUKOVA M G  
 TI COMPARATIVE STUDY OF THE PROPERTIES OF THE FIBRINOGEN-HEPARIN COMPLEX OBTAINED IN-VITRO AND ISOLATED FROM PLASMATIC FRACTION OF FIBRINOGEN DEGRADATION PRODUCTS.  
 SO BIOL NAUKI (MOSC), (1979 (RECD 1980)) 0 (9), 58-62.  
 CODEN: BINKBT. ISSN: 0470-4606.
- L8 ANSWER 112 OF 144 CAPLUS COPYRIGHT 2003 ACS  
 AU Lyapina, L. A.; Strukova, S. M.; Kudryashov, B. A.  
 TI Formation of a heparin-prothrombin complex  
 SO Voprosy Meditsinskoi Khimii (1979), 25(1), 41-6  
 CODEN: VMDKAM; ISSN: 0042-8809
- L8 ANSWER 113 OF 144 CAPLUS COPYRIGHT 2003 ACS  
 AU Cederholm-Williams, S. A.  
 TI The binding of fibrinolytic enzymes to fibrin  
 SO Progress in Chemical Fibrinolysis and Thrombolysis (1979), 4, 32-8  
 CODEN: PCFTDS; ISSN: 0361-0233
- L8 ANSWER 114 OF 144 MEDLINE DUPLICATE 52  
 AU Laudano A P; Doolittle R F  
 TI Synthetic peptide derivatives that bind to fibrinogen and prevent the **polymerization of fibrin monomers**.  
 SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1978 Jul) 75 (7) 3085-9.  
 Journal code: 7505876. ISSN: 0027-8424.

L8 ANSWER 115 OF 144 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 53  
 AU Brosstad, F.; Kierulf, P.; Gravem, K.; Godal, H. C.  
 TI Purification and insolubilization of reptilase for the preparation of  
 human DES-AA **fibrin monomers** in urea  
 SO Thrombosis Research (1978), 13(5), 715-23  
 CODEN: THBRAA; ISSN: 0049-3848

L8 ANSWER 116 OF 144 MEDLINE DUPLICATE 54  
 AU Gralnick H R; Givelber H; Abrams E  
 TI Dysfibrinogenemia associated with hepatoma. Increased carbohydrate content  
 of the fibrinogen molecule.  
 SO NEW ENGLAND JOURNAL OF MEDICINE, (1978 Aug 3) 299 (5) 221-6.  
 Journal code: 0255562. ISSN: 0028-4793.

L8 ANSWER 117 OF 144 MEDLINE  
 AU Inada Y; Hessel B; Blomback B  
 TI Photooxidation of fibrinogen in the presence of methylene blue and its  
 effect on **polymerization**.  
 SO BIOCHIMICA ET BIOPHYSICA ACTA, (1978 Jan 25) 532 (1) 161-70.  
 Journal code: 0217513. ISSN: 0006-3002.

L8 ANSWER 118 OF 144 MEDLINE  
 AU Matsuda M; Yoshida N; Aoki N; Wakabayashi K  
 TI Distribution of cold-insoluble globulin in plasma and tissues.  
 SO ANNALS OF THE NEW YORK ACADEMY OF SCIENCES, (1978 Jun 20) 312 74-92.  
 Journal code: 7506858. ISSN: 0077-8923.

L8 ANSWER 119 OF 144 MEDLINE DUPLICATE 55  
 AU Martinez J; Palascak J; Peters C  
 TI Functional and metabolic properties of human asialofibrinogen.  
 SO JOURNAL OF LABORATORY AND CLINICAL MEDICINE, (1977 Feb) 89 (2) 367-77.  
 Journal code: 0375375. ISSN: 0022-2143.

L8 ANSWER 120 OF 144 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 56  
 AU Brosstad, F.; Godal, H. C.; Kierulf, P.  
 TI Some characteristics of various **fibrin monomer**  
 preparations made from dissolved fibrin clots  
 SO Haemostasis (1977), 6(4), 213-24  
 CODEN: HMTSB7; ISSN: 0301-0147

L8 ANSWER 121 OF 144 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
 AU PLOW E F  
 TI STABILITY OF THE DI SULFIDE BONDS OF FIBRINOGEN AND IDENTIFICATION OF  
 SPECIFIC SUBSETS OF SURFACE ORIENTED HISTIDINE RESIDUES HIGHLY SUSCEPTIBLE  
 TO ALKYLATION.  
 SO EUR J BIOCHEM, (1977) 80 (1), 55-64.  
 CODEN: EJBCAI. ISSN: 0014-2956.

L8 ANSWER 122 OF 144 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
 AU KLOCZEWIAK M; WEGRZYNOWICZ Z; MATTHIAS F R; HEENE D L; ZAJDEL M  
 TI STUDIES ON CHEMICALLY MODIFIED FIBRINOGEN.  
 SO THROMB HAEMOSTASIS, (1976) 35 (2), 324-333.  
 CODEN: THHADQ. ISSN: 0340-6245.

L8 ANSWER 123 OF 144 MEDLINE DUPLICATE 57  
 AU Suzuki K; Hashimoto S  
 TI The influences of divalent metal ions on **fibrin monomer**  
**polymerization**.  
 SO BIOCHIMICA ET BIOPHYSICA ACTA, (1976 Aug 9) 439 (2) 310-5.  
 Journal code: 0217513. ISSN: 0006-3002.

L8 ANSWER 124 OF 144 MEDLINE DUPLICATE 58  
 AU Demchenko A P; Zima V L; Galanova T F; Belitser V A

TI [Fibrinogen and **fibrin monomer** conformation changes dependent of pH magnitude].  
 Konformatsionnoe izmeneniia fibrinogena i monomernogo fibrina, zavisimye ot velichiny pH.  
 SO MOLEKULIARNAIA BIOLOGIIA, (1976 Mar-Apr) 10 (2) 305-13.  
 Journal code: 0105454. ISSN: 0026-8984.

L8 ANSWER 125 OF 144 MEDLINE DUPLICATE 59  
 AU Roberts P S; Hughes H N; Fleming P B  
 TI The effects of hepes buffer on clotting tests, assay of factors V and VIII and on the hydrolysis of esters by thrombin and thrombokinase.  
 SO THROMBOSIS AND HAEMOSTASIS, (1976 Feb 29) 35 (1) 202-10.  
 Journal code: 7608063. ISSN: 0340-6245.

L8 ANSWER 126 OF 144 CAPLUS COPYRIGHT 2003 ACS  
 AU Cherches, Kh. A.; Ezerskaya, T. P.; Barkovskii, E. V.; Kaletskaya, T. V.  
 TI Effect of citrate complex **acids** of the lanthanum-cerium group on the conversion of fibrinogen into fibrin  
 SO Tezisy Dokl. - Konf. Beloruss. Biokhim. O-va., 2nd (1974), 52. Editor(s): Vecher, A. S. Publisher: "Nauka i Tekhnika", Minsk, USSR.  
 CODEN: 33XOAH

L8 ANSWER 127 OF 144 CAPLUS COPYRIGHT 2003 ACS  
 AU Kotschy, Maria  
 TI Influence of prothrombin and fibrinogen antisera on the coagulation system of oxblood  
 SO Folia Haematologica (Leipzig) (1972), 98(4), 426-36  
 CODEN: FOHEAW; ISSN: 0323-4347

L8 ANSWER 128 OF 144 CAPLUS COPYRIGHT 2003 ACS  
 AU Loly, W.; Israels, L. G.; Bishop, A. J.; Israels, E. D.  
 TI Comparative study of adult and fetal sheep fibrinogen, sulf-fibrinogen, and fibrinogen degradation products  
 SO Thrombosis et Diathesis Haemorrhagica (1971), 26(3), 526-40  
 CODEN: TDHAAT; ISSN: 0340-5338

L8 ANSWER 129 OF 144 CAPLUS COPYRIGHT 2003 ACS  
 AU Mueller-Berghaus, G.; Roka, L.; Lasch, H. G.  
 TI **Fibrin monomers** and the Sanarelli-Shwartzman phenomenon  
 SO Verhandlungen der Deutschen Gesellschaft fuer Innere Medizin (1971), 77, 161-4  
 CODEN: VDGIA2; ISSN: 0070-4067

L8 ANSWER 130 OF 144 CAPLUS COPYRIGHT 2003 ACS  
 AU Kopec, Maria; Wegrzynowicz, Zenon; Latallo, Zbigniew S.  
 TI Precipitation of soluble **fibrin monomer** complexes [SFM] by cellular basic proteins, and the antagonistic effect of sulfonated mucopolysaccharides  
 SO Proceedings of the Society for Experimental Biology and Medicine (1970), 135(3), 675-9  
 CODEN: PSEBAA; ISSN: 0037-9727

L8 ANSWER 131 OF 144 CAPLUS COPYRIGHT 2003 ACS  
 AU Collen, D.; Vandereycken, G.; De Maeyer, L.  
 TI Influence of hydrostatic pressure on the reversible **polymerization of fibrin monomers**  
 SO Nature (London, United Kingdom) (1970), 228(5272), 669-71  
 CODEN: NATUAS; ISSN: 0028-0836

L8 ANSWER 132 OF 144 CAPLUS COPYRIGHT 2003 ACS  
 AU Sherman, Laurence A.; Mosesson, Michael W.; Sherry, Sol  
 TI Isolation and characterization of the clottable low-molecular-weight fibrinogen derived by limited plasmin hydrolysis of human fraction I-4

SO Biochemistry (1969), 8(4), 1515-23  
CODEN: BICHAW; ISSN: 0006-2960

L8 ANSWER 133 OF 144 CAPLUS COPYRIGHT 2003 ACS  
AU Shamash, Yeheskel; Alexander, Benjamin  
TI Coagulation studies with linear copolymers of aliphatic hydrocarbons and maleic acid: new class of anticoagulants  
SO Biochimica et Biophysica Acta (1969), 194(2), 449-61  
CODEN: BBACAQ; ISSN: 0006-3002

L8 ANSWER 134 OF 144 CAPLUS COPYRIGHT 2003 ACS  
AU Solum, Nils O.; Lopaciuk, Stanislaw  
TI Bovine platelet proteins. III. Some properties of platelet fibrinogen  
SO Thrombosis et Diathesis Haemorrhagica (1969), 21, 428-40  
CODEN: TDHAAT; ISSN: 0340-5338

L8 ANSWER 135 OF 144 CAPLUS COPYRIGHT 2003 ACS  
AU Lipinski, Boguslaw  
TI Demonstration of antiparacoagulating activity of acid mucopolysaccharides and extracts of the aortic wall  
SO Thrombosis et Diathesis Haemorrhagica (1969), 22(2), 401-2  
CODEN: TDHAAT; ISSN: 0340-5338

L8 ANSWER 136 OF 144 CAPLUS COPYRIGHT 2003 ACS  
AU Arima, Kei; Kakinuma, Atsushi; Tamura, Gakuzo  
TI Surfactin, a crystalline peptidelipid surfactant produced by Bacillus subtilis: isolation, characterization, and its inhibition of fibrin clot formation  
SO Biochemical and Biophysical Research Communications (1968), 31(3), 488-94  
CODEN: BBRCA9; ISSN: 0006-291X

L8 ANSWER 137 OF 144 CAPLUS COPYRIGHT 2003 ACS  
AU Pechet, Liberto; Engel, Araceli M.; Goldstein, Carlos; Glaser, Bela  
TI Effects of infusing thrombin and its acetylated derivative. I. Coagulation and fibrinolysis  
SO Thrombosis et Diathesis Haemorrhagica (1968), 20(1-2), 190-201  
CODEN: TDHAAT; ISSN: 0340-5338

L8 ANSWER 138 OF 144 CAPLUS COPYRIGHT 2003 ACS  
AU Mosesson, M. W.; Alkjaersig, Norma; Sweet, B.; Sherry, Sol  
TI Human fibrinogen of relatively high solubility. Comparative biophysical, biochemical, and biological studies with fibrinogen of lower solubility  
SO Biochemistry (1967), 6(10), 3279-87  
CODEN: BICHAW; ISSN: 0006-2960

L8 ANSWER 139 OF 144 CAPLUS COPYRIGHT 2003 ACS  
AU Rubin, Harry; Ritz, Norton D.  
TI The inhibitory effect of sialic acid on fibrinolysis  
SO Thrombosis et Diathesis Haemorrhagica (1967), 17(1/2), 23-30  
CODEN: TDHAAT; ISSN: 0340-5338

L8 ANSWER 140 OF 144 CAPLUS COPYRIGHT 2003 ACS  
AU Endres, G. F.; Scheraga, H. A.  
TI Equilibria in fibrinogen-fibrin conversion. VII. On the mechanism of the reversible polymerization of fibrin monomer  
SO Biochemistry (1966), 5(5), 1568-77

L8 ANSWER 141 OF 144 CAPLUS COPYRIGHT 2003 ACS  
AU Haschemever, A. E. V.  
TI A polar intermediate in the conversion of fibrinogen to fibrin monomer  
SO Biochemistry (1963), 2(4), 851-8

L8 ANSWER 142 OF 144 CAPLUS COPYRIGHT 2003 ACS

AU Belitser, V. O.; Kotkova, K. I.  
TI Photooxidation of fibrinogen and of **fibrin monomer**  
SO Ukrain. Biokhim. Zhur. (1960), 32(No. 1), 3-10; Russian summary, 10-11

L8 ANSWER 143 OF 144 CAPLUS COPYRIGHT 2003 ACS  
AU Belitser, V. O.; Khodorova, E. L.  
TI Conversion of fibrinogen to fibrin  
SO Aktual'nye Voprosy Sovremennoi Biokhimii, Moscow, Sbornik (1959), 1, 275-83  
From: Referat. Zhur. Khim., Biol. Khim. 1961, Abstr. No. 14S1126.

L8 ANSWER 144 OF 144 CAPLUS COPYRIGHT 2003 ACS  
AU Gottlieb, Sheldon F.; Celander, D. R.; Guest, M. M.  
TI Effect of ethylenediaminetetraacetic **acid** (EDTA) on fibrin **polymerization**  
SO Texas Repts. Biol. and Med. (1959), 17, 205-9

=> d 123 124 130 131 139 140 141 144 bib ab 18

L8 ANSWER 123 OF 144 MEDLINE DUPLICATE 57  
AN 76253784 MEDLINE  
DN 76253784 PubMed ID: 821534  
TI The influences of divalent metal ions on **fibrin monomer polymerization**.  
AU Suzuki K; Hashimoto S  
SO BIOCHIMICA ET BIOPHYSICA ACTA, (1976 Aug 9) 439 (2) 310-5.  
Journal code: 0217513. ISSN: 0006-3002.  
CY Netherlands  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 197610  
ED Entered STN: 19900313  
Last Updated on STN: 19970203  
Entered Medline: 19761029  
AB This work was undertaken in an attempt to clarify the influences of divalent metal ions on the **polymerization of fibrin monomer**. **Polymerization** was strongly inhibited by such Ca-binding chelating agents as 1,2-cyclohexanediaminetetraacetic **acid**, ethylenediaminetetraacetic **acid** and glycoletherdiaminetetraacetic **acid**, and a close relationship was seen between their inhibitory capacity and their stability against Ca<sup>2+</sup>. The **polymerization** inhibited by ethylenediaminetetraacetic **acid** could not be reversed by the addition of Mg<sup>2+</sup>, Sr<sup>2+</sup> or Ba<sup>2+</sup>, whose stability constants are smaller than that of Ca<sup>2+</sup>, but it could be completely reversed, and even directly accelerated by Zn<sup>2+</sup>, Cu<sup>2+</sup>, Cd<sup>2+</sup> or Co<sup>2+</sup> whose stability constants are greater than that of Ca<sup>2+</sup>.

L8 ANSWER 124 OF 144 MEDLINE DUPLICATE 58  
AN 76242667 MEDLINE  
DN 76242667 PubMed ID: 7745  
TI [Fibrinogen and **fibrin monomer** conformation changes dependent of pH magnitude].  
Konformatsionnoe izmeneniia fibrinogena i monomernogo fibrina, zavisimye ot velichiny pH.  
AU Demchenko A P; Zima V L; Galanova T F; Belitser V A  
SO MOLEKULIARNAIA BIOLOGIIA, (1976 Mar-Apr) 10 (2) 305-13.  
Journal code: 0105454. ISSN: 0026-8984.  
CY USSR  
DT Journal; Article; (JOURNAL ARTICLE)  
LA Russian  
FS Priority Journals  
EM 197609

ED Entered STN: 19900313  
 Last Updated on STN: 19950206  
 Entered Medline: 19760925

AB Conformational states of fibrinogen and **fibrin monomer** were studied by methods of differential and solvent-perturbation spectrophotometry and ultraviolet fluorescence at about neutral pH (6.5) and in the region of lower pH, 3.2 to 4.0. To prevent repolymerization of **fibrin monomer** at pH 6.5, urea was added in a non-denaturing concentration of 1.7 M. In the **acid** region specified, the immediate environment of tyrosine and tryptophan residues was found to be more polar and the accessibility to perturbants higher than at pH 6.5. Much more drastic changes of the same type occurred at pH less than 3 when denaturation of the protein takes place. The conformation of fibrinogen altered progressively upon lowering pH from 4.0 to 3.2. This acidity increase, practically, did not influence the conformation of **fibrin monomer**. Thus the tolerance of the latter to the appearance of the new positively charged groups seems to be comparably high. The bulk of the conformational changes subsequent upon neutralization of an **acid fibrin monomer** solution proceeds at a higher rate than the activation transition, i.e. the acquirement of a state of **polymerization** readiness by **fibrin monomer** molecules.

L8 ANSWER 130 OF 144 CAPLUS COPYRIGHT 2003 ACS  
 AN 1971:11683 CAPLUS  
 DN 74:11683  
 TI Precipitation of soluble **fibrin monomer** complexes [SFMC] by cellular basic proteins, and the antagonistic effect of sulfonated mucopolysaccharides  
 AU Kopeck, Maria; Wegrzynowicz, Zenon; Latallo, Zbigniew S.  
 CS Dep. Radiobiol. Health Prot., Inst. Nucl. Res., Warsaw, Pol.  
 SO Proceedings of the Society for Experimental Biology and Medicine (1970); 135(3), 675-9.  
 CODEN: PSEBAA; ISSN: 0037-9727  
 DT Journal  
 LA English  
 AB Histones from calf thymus and liver pptd. 131I-SFMC and neutralized anticlotting activity of heparin nearly as efficiently as protamine. Lysozyme showed both activities but had to be used in 10-fold higher concns. to induce similar effects. Cytochrome c neutralized heparin but did not ppt. SFMC. Heparin, chondroitin sulfate, and bovine aorta exts. inhibited pptn. of SFMC induced by protamine and histones.

L8 ANSWER 131 OF 144 CAPLUS COPYRIGHT 2003 ACS  
 AN 1971:28108 CAPLUS  
 DN 74:28108  
 TI Influence of hydrostatic pressure on the reversible **polymerization** of **fibrin monomers**  
 AU Collen, D.; Vandereycken, G.; De Maeyer, L.  
 CS Lab. Phys. Chem. II, Univ. Leuven, Louvain, Belg.  
 SO Nature (London, United Kingdom) (1970), 228(5272), 669-71  
 CODEN: NATUAS; ISSN: 0028-0836  
 DT Journal  
 LA English  
 AB Bovine fibrinogen and **fibrin monomer** solns. showed no changes in light scattering under pressures .ltoreq.3200 kg/cm2. Intermediately polymd. **fibrin monomer** at pH 5.75-6.15 showed a decrease in light scattering at pressures .ltoreq.2500 kg/cm2, due to depolymn. The **polymn.**-depolympn. was completely reversible. Similar depolymn. was obsd. in ammonium acetate and morpholinoethane-sulfonic **acid** buffer as well as NaBr-acetate buffer. Fibrin **polymn.** is accompanied by a vol. increase due to the formation of salt linkages in sufficient no. to mask the vol. decrease due to H-bonding and electrostriction.



L8 ANSWER 139 OF 144 CAPLUS COPYRIGHT 2003 ACS  
 AN 1967:114341 CAPLUS  
 DN 66:114341  
 TI The inhibitory effect of sialic acid on fibrinolysis  
 AU Rubin, Harry; Ritz, Norton D.  
 CS Maimonides Hosp., Brooklyn, NY, USA  
 SO Thrombosis et Diathesis Haemorrhagica (1967), 17(1/2), 23-30  
 CODEN: TDHAAT; ISSN: 0340-5338  
 DT Journal  
 LA English  
 AB Increasing amts. (up to 500 .mu.g.) of N-acetylneuraminic acid (I) or glycolylneuraminic acid (II) increasingly inhibited the hydrolysis of 51Cr-labeled casein by .alpha.-chymotrypsin and human plasmin, while N,O-diacetylneuraminic acid was ineffective. The inhibitory effect of the 2 active sialic acids was increased by increasing the ionic strength of the reaction medium. I (4 .times. 10-4M) and II (4 .times. 10-4M) also inhibited the fibrinolytic action of human plasmin on heated and unheated bovine fibrin plates; the av. inhibitions by I were 52 and 39% of the control values, resp., while the resp. inhibitions by II were 69 and 35.5%. I increased the inhibitory effect of human serum inhibitors in reducing the proteolysis of 51Cr-labeled casein by thrombolysin. I, however, did not accelerate the **polymn.** of **fibrin monomers**. I may play an important role in preserving the integrity of fibrin deposits in the body. 18 references.

L8 ANSWER 140 OF 144 CAPLUS COPYRIGHT 2003 ACS  
 AN 1966:106033 CAPLUS  
 DN 64:106033  
 OREF 64:20049a-c  
 TI Equilibria in fibrinogen-fibrin conversion. VII. On the mechanism of the reversible **polymerization** of **fibrin monomer**  
 AU Endres, G. F.; Scheraga, H. A.  
 CS Cornell Univ., Ithaca, NY  
 SO Biochemistry (1966), 5(5), 1568-77  
 DT Journal  
 LA English  
 AB cf. preceding abstr. An investigation was made of the mechanistic implications of the previously detd. ionization and enthalpy changes in the reversible **polymerization** of **fibrin monomer** in 1.0M NaBr at 25.0.degree.. The math. treatment of the pH dependence of these quantities, originally derived for a **polymerization** model involving intermol. H bonding between ionizable groups, was restated in more general terms applicable to other types of bonding between such groups. Taking the max. heat of formation of a single H bond between groups in water as .apprx. -1.5 kcal./mole (rather than the previous overestimate of -6 kcal./mole), it is not possible to account satisfactorily for the observed results with the simple H bonding model. Consideration was also given without success to the possibility of H bonds buried in nonpolar regions and of H bonds competing with anion binding to the protonated form of the acceptor group. The results appear to be entirely consistent with the postulation of intermol. coordinate covalent bonds, in which the electron donors are .alpha.-amino groups of the N-terminal amino acid residues, and the acceptors are imine-type functional groups. This view is supported by the known involvement of the .alpha.-amino groups in the subsequent irreversible clot-stabilization reaction. The possible relation between reversible **polymerization** and clot stabilization is discussed, and a mechanism is suggested for covalent bond formation. In this mechanism, the proposed imine-type acceptor groups are derived from carbohydrate-bound side-chain amide groups.

L8 ANSWER 141 OF 144 CAPLUS COPYRIGHT 2003 ACS  
 AN 1963:429515 CAPLUS



DN 59:29515  
 OREF 59:5389g-h,5390a-c  
 TI A polar intermediate in the conversion of fibrinogen to **fibrin monomer**  
 AU Haschemever, A. E. V.  
 CS Univ. of California, Berkeley  
 SO Biochemistry (1963), 2(4), 851-8  
 DT Journal  
 LA Unavailable  
 AB A protein intermediate characterized by a large longitudinal permanent dipole moment was found to occur in the conversion of fibrinogen to **fibrin monomer** by thrombin and by the snake venom ext. Hemostase. The exptl. method involved incubation of fibrinogen with the enzyme in a buffered solvent at pH 6.2, where enzymic activity is high and the reaction proceeds to the formation of a fibrin clot. At early times the reaction was stopped by the addn. of **acid**, and the mixt. was dialyzed into a solvent suitable for transient elec. birefringence measurement. Analysis of the birefringence as a function of incubation time established the presence of the intermediate species and its kinetics of formation. Peptide release was detd. by N analysis on the trichloroacetic **acid**-sol. fraction of the reaction mixt. The results are consistent with the identification of the polar intermediate as a fibrinogen mol. lacking one A peptide. Its dipole moment was obtained as a function of pH from birefringence measurements at satg. elec. fields and was used to det. the site at which charge alteration had occurred. This, together with birefringence data for fibrinogen and fibrin monomer, led to the conclusion that the 2 A peptides of fibrinogen are located near the ends of the mol., equidistant from the center. The presence of a transverse dipole moment in **fibrin monomer** suggests the sites may be on the same side of the mol. The B peptides released by thrombin are apparently symmetrically located. In kinetic studies at early times in the thrombin-catalyzed reaction, both the formation of the polar intermediate and the release of peptide were linear; however, quant. considerations indicated that the reaction at early times did not follow a simple mechanism. Direct detn. of rotational diffusion coeffs. during clotting at pH 8 established that the 1st step in the **polymerization of fibrin monomer** is end-to-end dimerization. End-to-end dimers also appeared at pH 4-5, where fibrin is largely monomeric. Polar dimers were observed along with the polar monomers in solns. of partially reacted fibrinogen. Comparison of rotational diffusion coeffs. for the monomeric species of fibrinogen, the polar intermediate, and fibrin showed that little change in the length of the mol. occurs during peptide release, as is generally accepted.

L8 ANSWER 144 OF 144 CAPLUS COPYRIGHT 2003 ACS  
 AN 1959:84552 CAPLUS  
 DN 53:84552  
 OREF 53:15274f-g  
 TI Effect of ethylenediaminetetraacetic **acid** (EDTA) on fibrin **polymerization**  
 AU Gottlieb, Sheldon F.; Celander, D. R.; Guest, M. M.  
 CS Univ. of Texas Med. Branch, Galveston  
 SO Texas Repts. Biol. and Med. (1959), 17, 205-9  
 DT Journal  
 LA Unavailable  
 AB Na ethylenediaminetetraacetate (pH 7.4, 0.005M) inhibited the clotting of fibrinogen (prepared from oxalated plasma) by com. thrombin. This inhibition was reversed by Ca, Cu, and Co ions (0.005M). Mg and Fe ions were less effective, the latter perhaps because of ppt. formation. The EDTA anion either blocks the splitting off of the highly charged polypeptide from fibrinogen or rapidly replaces the neg. charge on the **fibrin monomer** as it forms, preventing **polymerization**.

=>

=> d his

(FILE 'HOME' ENTERED AT 14:06:21 ON 06 MAR 2003)

FILE 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH' ENTERED AT 14:06:38 ON 06 MAR 2003

L1 3777 S FIBRIN(3A) MONOMER  
L2 15630 S (PREVENT? OR AVOID) (4A) POLYMER?  
L3 26 S L1 AND L2  
L4 11 DUP REM L3 (15 DUPLICATES REMOVED)

=> dau ti so 1-11 l4

DAU IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

=> d au ti so 1-11 l4

L4 ANSWER 1 OF 11 MEDLINE DUPLICATE 1  
AU Dempfle C E; Dollman M; Lill H; Puzzovio D; Dessauer A; Heene D L  
TI Binding of a new monoclonal antibody against N-terminal heptapeptide of  
fibrin alpha-chain to fibrin polymerization site 'A': effects of  
fibrinogen and fibrinogen derivatives, and pretreatment of samples with  
NASCN.  
SO BLOOD COAGULATION AND FIBRINOLYSIS, (1993 Feb) 4 (1) 79-86.  
Journal code: 9102551. ISSN: 0957-5235.

L4 ANSWER 2 OF 11 MEDLINE DUPLICATE 2  
AU Cierniewski C S; Kloczewiak M; Budzynski A Z  
TI Expression of primary polymerization sites in the D domain of human  
fibrinogen depends on intact conformation.  
SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1986 Jul 15) 261 (20) 9116-21.  
Journal code: 2985121R. ISSN: 0021-9258.

L4 ANSWER 3 OF 11 MEDLINE DUPLICATE 3  
AU Gonias S L; Pasqua J J; Greenberg C; Pizzo S V  
TI Precipitation of fibrinogen, fibrinogen degradation products and  
**fibrin monomer** by histone H3.  
SO THROMBOSIS RESEARCH, (1985 Jul 1) 39 (1) 97-116.  
Journal code: 0326377. ISSN: 0049-3848.

L4 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 4  
AU Laudano, Andrew P.; Doolittle, Russell F.  
TI Studies on synthetic peptides that bind to fibrinogen and **prevent**  
**fibrin polymerization**. Structural requirements, number of  
binding sites, and species differences  
SO Biochemistry (1980), 19(5), 1013-19  
CODEN: BICHAW; ISSN: 0006-2960

L4 ANSWER 5 OF 11 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. DUPLICATE 5  
AU LAUDANO A P; DOOLITTLE R F  
TI COMPETITIVE BINDING AND INHIBITION STUDIES ON SYNTHETIC PEPTIDES THAT  
**PREVENT THE POLYMERIZATION OF FIBRIN**  
**MONOMERS**.  
SO Fed. Proc., (1979) 38 (3 PART 1), 792.  
CODEN: FEPA7. ISSN: 0014-9446.

L4 ANSWER 6 OF 11 MEDLINE DUPLICATE 6  
AU Laudano A P; Doolittle R F  
TI Synthetic peptide derivatives that bind to fibrinogen and **prevent**  
the **polymerization of fibrin monomers**.

SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1978 Jul) 75 (7) 3085-9.  
Journal code: 7505876. ISSN: 0027-8424.

L4 ANSWER 7 OF 11 MEDLINE DUPLICATE 7  
AU Chao F C; Tullis J L; Conneely G S; Lawler J W  
TI Aggregation of platelets and inert particles induced by thrombin.  
SO THROMBOSIS AND HAEMOSTASIS, (1976 Jun 30) 35 (3) 717-36.  
Journal code: 7608063. ISSN: 0340-6245.

L4 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2003 ACS  
AU Musjalkovska, A. A.; Khodorova, E. L.; Pozdnyakova, T. M.  
TI Isolation of the dimer of fragment D from stabilized fibrin and study of its antipolymerization action  
SO Ukrains'kii Biokhimichnii Zhurnal (1946-1977) (1976), 48(2), 139-43  
CODEN: UBZHAZ; ISSN: 0372-3909

L4 ANSWER 9 OF 11 MEDLINE DUPLICATE 8  
AU Brass E P; Forman W B; Edwards R V; Lindan O  
TI Fibrin formation: the role of the fibrinogen-fibrin monomer complex.  
SO THROMBOSIS AND HAEMOSTASIS, (1976 Aug 31) 36 (1) 37-48.  
Journal code: 7608063. ISSN: 0340-6245.

L4 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2003 ACS  
AU Copley, A. L.; Luchini, B. W.  
TI The binding of human fibrinogen to native and fraction fibrins and the inhibition of polymerization of a new human fibrin monomer by fibrinogen  
SO Life Sci. (1964), 3(11), 1293-1305

L4 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2003 ACS  
AU Gottlieb, Sheldon F.; Celander, D. R.; Guest, M. M.  
TI Effect of ethylenediaminetetraacetic acid (EDTA) on fibrin polymerization  
SO Texas Repts. Biol. and Med. (1959), 17, 205-9

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